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ABSTRACT OF THE DISCLOSURE

A heat resistant carburized rolling bearing component is formed of a steel material at least containing, as alloy elements in a matrix, by mass %, at least 0.1% and at most 0.4% of C, at least 0.3% and at most 3.0% of Si, at least 0.2% and at most 2.0% of Mn, at most 0.03% of P, at most 0.03% of S, at least 0.3% and less tan 2.5% of Cr, at least 0.1% and less than 2.0% of Ni, at most 0.050% of Al, at most 0.003% of Ti, at most 0.0015% of O and at most 0.025% of N, and a remaining part of Fe and an unavoidable impurity, and the bearing component is prepared by performing carburizing carbonitriding process followed by quenching, and after quenching, tempering at a tempering temperature of at least 200°C and at most 350°C, and surface hardness after tempering process is at least HRC57. Thus, an inexpensive heat resistant carburized rolling bearing component and manufacturing method thereof can be obtained, which realizes superior rolling fatigue life, wear resistance and dimensional stability under the environment involving foreign matters and high temperature.